

THE
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

AND

OREGON STATE UNIVERSITY AGRICULTURAL EXPERIMENT STATION

AND

WASHINGTON STATE UNIVERSITY AGRICULTURAL EXPERIMENT STATION

NOTICE OF THE RELEASE OF 'NEHALEM'
PACIFIC WILLOW (Salix lasiandra, Benth.)

Notification of the naming and release of 'Nehalem' Pacific willow.

'Nehalem' Pacific willow, Salix lasiandra, is a vegetatively propagated cultivar recommended for use in streambank stabilization and the restoration of riparian areas. It also has potential for use as native screens, wildlife habitat, windbreaks, and natural area landscaping. It appears to tolerate flooding well and may be useful for vegetating the shores of reservoir drawdown zones.

'Nehalem' Pacific willow is a medium-tall shrub 2-9 meters (m) [6-30 feet] in height with shiny, long-pointed foliage and a multistemmed, upright to rounded form. Leaves are finely toothed and resemble peach leaves. 'Nehalem' is male and therefore produces only staminate flowers in April to May. The name refers to the Nehalem River in northwestern Oregon where the material was originally collected.

Origin: 'Nehalem' is a selection from a native collection made in Columbia County, Oregon in March 1978 by Raymond Wilson of the Soil Conservation Service. Five uniform plants were chosen by the SCS Corvallis Plant Materials Center to provide the source material for the foundation cutting block established in 1983.

Description: 'Nehalem' Pacific willow is a multistemmed, medium-tall shrub 2-9 m in height with dark gray or brown bark that becomes fissured and scaly with age. Young twigs are finely spreading, shiny, and reddish to distinctly yellow in color. Leaves are alternate, bright green above and glaucous below, glabrous or soon so, lanceolate to narrowly elliptic in shape, acuminate, 6-13 centimeters (cm) long, 1-3 cm wide, 4 to 12 times longer than wide, with finely serrulate margins; petioles short, 4-15 millimeters (mm) long, with one or more tiny but distinct yellow-brown glands toward the leaf blade; stipules well developed and leafy; male catkins 2-7 cm long, with yellow scales, and born on the end of leafy branchlets 5-12 cm long; stamens 4-9 per flower but usually 5. Catkins emerge in late April or May at the same time as the leaves. Leaves are deciduous, falling by late November.

Positive identification of 'Nehalem' Pacific willow as Salix lasiandra Benth. was obtained from Dr. La Rea Johnston, Assistant Curator, Oregon State University Herbarium, Corvallis, Oregon.

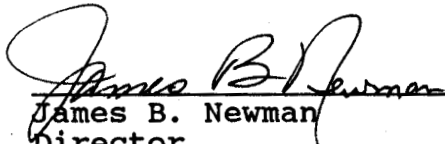
'Nehalem' was first assigned the SCS accession number 9004814. In January, 1987 it was officially designated PI-508555 under the name S. lasiandra.

Adaptation: 'Nehalem' Pacific willow is known to be adapted to riparian areas, streambanks, sandbars, and other moist sites in mountain valleys west of the Cascade Range in Oregon and Washington as well as northern California where precipitation exceeds 760 mm (30 inches). Potential area of adaptation includes the Sierra Nevada foothills and valleys and the California Coast Range. *S. lasiandra* is indigenous to larger streams and lakeshores at sea level to 2450 m (8000 feet) from southern California to Alaska: also, moist regions of the intermountain west and Rocky Mountains to South Dakota. It has been found to survive along and well below the upper shoreline of reservoir drawdown zones. Pacific willow occurs on well drained sandy loams to rich, gravelly soils but tolerates poorly drained clays.

Performance: 'Nehalem' Pacific willow or 9004814 was evaluated in an observational row nursery against 105 accessions or individual clones comprising at least 8 native species. Accession 9004814 was one of 24 *S. lasiandra* ecotypes tested. It was selected for its uniformity, attractive foliage, apparent freedom from serious disease pests, and higher basal stem density. Budbreak is as late as, or later than, all other Pacific willows tested. On an upland soil without irrigation, 'Nehalem' attained a height of 1.8 m (6 feet) after 4 years and 3.1 m (10 feet) after 9 years at the Corvallis Plant Materials Center (40 inch ppt.). Growth rates ranged 33-91 cm (1.1-3.0 feet) per year on same site. Higher rates can be expected in moist areas where plant competition is not severe. Data from 41 field plantings along streams, water courses and on similar low maintenance sites in Oregon and Washington indicates an overall survival rate of 45 percent after 1 to 5 years. However, where proper site selection and planting methods are used, survival exceeds 80 percent.

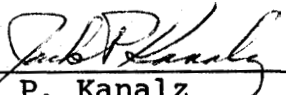
Propagation: 'Nehalem' Pacific willow is a vegetatively propagated cultivar. Fifteen to 20 cm (6-8 inch) cuttings, 6-13 mm (1/4 to 1/2 inch) in diameter, will root readily in moist potting medium under greenhouse conditions. Thirty to 50 cm (12-20 inch) cuttings planted directly into the field will grow if adequate moisture exists and proper site preparation and planting techniques are employed. Where water tables are low or receding, 90-150 cm (3-5 foot) unrooted whips, 13 mm (1/2 inch) or more in diameter, can be utilized to improve survival.

Material Distribution: Foundation stock will be available January, 1989 in limited quantities to commercial nurseries, agricultural experiment stations, researchers, and arboreta through the Oregon State University Seed and Plant Certification Program, Corvallis, Oregon 97331. The USDA, Soil Conservation Service, Plant Materials Center, 3420 NE Granger, Corvallis, Oregon 97330 will maintain original mother plants for supplying certified stock. Material should be available commercially by January, 1991.

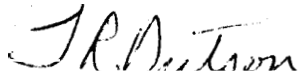

James B. Newman
Director

10-19-88
Date

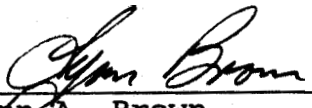
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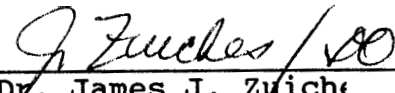
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